WHAT IS CLAIMED IS:

1. A broadcast recording method utilizing a terminal device having broadcast signal receiving function and communication function, comprising:

a call detection step for detecting an incoming or outgoing call during receiving of a broadcast signal;

a receiving failure detection step for detecting a failure to receive said broadcast signal during receiving of the broadcast; and

a recording step for recording the broadcast signal when an incoming or outgoing call is detected by said call detection step or when a failure of receiving said broadcast signal is detected by said receiving failure detection step .

2. A broadcast recording method according to claim 1, further comprising:

a call termination detection step for detecting termination of call of mobile communication;

a recovery detection step for detecting recovery of the broadcast signal reception; and

a recording stop step for stopping recording of said broadcast signal when termination of call of mobile communication is detected in said call termination detection step or recovery of broadcast signal reception is detected in said recovery detection step.

3. A broadcast recording method according to claim 2, further comprising a playback step for playing back said recorded broadcast signal information, when recording of said broadcast signal is stopped by said recording stop step.

4. A broadcast recording method according to claim 1, wherein in said recording step said broadcast signal is recorded in a recording device installed in said terminal device.

5. A broadcast recording method according to claim 1, wherein in said recording step said broadcast signal is recorded in a recording device installed in an external recording server.

6. A broadcast recording method according to claim 5, wherein in said recording step said broadcast signal is recorded in a recording device installed in an external recording server when failure to receive the broadcast signal is detected in said receiving failure detection step.

7. A broadcast recording method according to claim 5, wherein in said recording step said broadcast signal is recorded in a recording device installed in an external recording server when it is impossible to record said broadcast signal in a recording device installed in said terminal device.

8. An information terminal device comprising a broadcast signal receiving function and a communication function, wherein said device transmits a command signal for recording a currently received broadcast signal in the external recording server when it is detected that the broadcast signal can not be received.

9. An information terminal device according to claim 8, wherein the currently received broadcast signal is recorded when an outgoing or incoming call of a communication occurs.

10. An information terminal device comprising a broadcast signal receiving function and a communication function, wherein a currently received broadcast signal is recorded when an outgoing or incoming call of a communication occurs.

11. An information terminal device according to claim 10, wherein said device sends a command signal to record currently received broadcast signals on an external recording server when it is detected that said broadcast signal can not be received.

12. A communication device comprising:

a broadcast signal receiving portion for receiving the broadcast signal;

a receiving-status detector portion for detecting the broadcast signal receiving status;

a receiving signal recording portion for recording the broadcast receiving information acquired from the broadcast signal,

an incoming-outgoing call detector portion for detecting an incoming or outgoing call, or termination of a call; and

a recording-start/recording-stop/playback command information generator portion for generating the recording-start, recording-stop, and playback-command information,

wherein the recording-start/recording-stop/playback command information generator portion sends recording command information for the broadcast signal to an external recording server via a communication network when a broadcast signal receiving failure is detected by the receiving-status detector portion, and sends the recording command information for the broadcast signal to an external recording server via a communication network when an incoming or outgoing call is detected by the incoming-outgoing call detector portion and/or notifies the receiving signal recording portion about the broadcast signal recording command information.

13. A communication device according to claim 12, wherein said recording-start/recording-stop/playback command information generator portion sends recording

command information for the broadcast signal to the external recording server over a communication network when said incoming-outgoing call detector portion detects an incoming or outgoing call and also that said receiving signal recording portion cannot perform recording.

14. A communication device according to claim 12, comprising:

a playback information receiving portion for receiving playback information from the recording server over the communication network; and

a playback portion for playing back said playback information,

wherein said recording-start/recording-stop/playback command information generator portion sends recording stop command information on the broadcast signal to the external recording server over the communication network when restoration of broadcast signal reception is detected by said receiving status detector portion and, sends recording stop information for the broadcast signal to the external recording server via the communication network when termination of a call is detected by said incoming-outgoing call detector portion and/or reports the recording stop information for the broadcast signal to said receiving signal recording portion.

15. A communication device according to claim 12, wherein said recording-start/recording-stop/playback command information generator portion sends recording/playback command information when recording stop command information for the broadcast signal is sent to an external recording server, and reports the recording/playback information when said recording stop command information for the broadcast signal is reported to said receiving signal recording portion.

16. A communication device according to claim 15, wherein said recording/playback information contains as a playback time the time from generating of said recording command information to the time when aid recording stop information is generated.

17. A recording server comprising:

a broadcast signal receiving portion for receiving broadcast signals;

a receiving signal recording portion for receiving broadcast receiving information acquired from the broadcast signals; and

a control portion for reporting recording commands or playback commands to said receiving signal recording portion when a recording command or a playback command is received over a communication network,

wherein said recording server sends said playback information over said communication network when playback commands are received over said communication network.

18. A broadcast recording system comprising a recording server containing a recording device and an information terminal device having broadcast signal functions and communication functions, wherein

said recording server records the broadcast information being received by said information terminal device when failure of receiving is detected during receiving of said broadcast signal by said information terminal device.

19. A broadcast recording system according to claim 18, wherein said recording server stops recording of broadcast information when said information terminal device detects signal reception recovery.

20. A broadcast recording system according to claim 18, wherein said recording server records broadcast information currently received by said information terminal device when said information terminal device starts communicating during receiving of broadcast signals.

21. A broadcast recording system according to claim 18, wherein said recording server stops recording of the broadcast information when the communication on said terminal information device ends.

22. A program for implementing the broadcast recording method according to one of claims 1 through 7.

23. A recording medium holding a program for implementing the broadcast recording method of claim 22.

24. A broadcast recording method for recording a broadcast program viewed or recorded on a mobile communication device containing communication functions or broadcast receiving functions by utilizing a program recording device containing a receiving function, wherein said method comprises:

a video-recording channel information receiving step for receiving as video-recording channel information, the broadcast program channel information sent from a mobile communication device and recorded or viewed on said communication device;

a user control information recording step for recording video-recording channel information received in said video-recording channel information receiving step that corresponds to said user or mobile communication device;

an interruption source detecting step for detecting the cause that the user stops recording or viewing a program on said mobile communication device;

a recording information command generating step for generating recording command information containing said

video-recording channel information of said user or mobile communication device that is recorded in said user control information recording step, when an interruption source is detected in said interruption source detecting step; and

a recording command information transmitting step for sending the recording command information generated in said recording information command generating step to said program recording device and for recording said video-recording channel information of the broadcast program in said program recording device.

25. A broadcast recording method for broadcast programs according to claim 24, wherein said interruption source detecting step is a call detection step for detecting an outgoing or incoming call for a mobile communication device.

26. A broadcast recording method for broadcast programs according to claim 25, further comprising:

a call termination detection step for detecting termination of at least one of either an incoming or outgoing call detected by said call detection step; and

a recording notification step for notifying said mobile communication device of the recording of said broadcast program based on recording command information generated by said recording command information generating step based on said call termination detection step.

27. A broadcast recording method for broadcast programs according to claim 25, further comprising:

a call termination detection step for detecting termination of at least one of either an incoming or outgoing call detected by said call detection step;

a recording notification/inquiry step for notifying said mobile communication device of recording of a broadcast program based on recording command information generated by said recording command information generating step, and for inquiring on whether or not said recorded broadcast program is necessary based on said call termination detection step;

a record deleting command information generating step for generating deleting command information for said broadcast program when a reply that said recording is not needed is sent from said mobile communication device in response to said recording notification/inquiry step; and

a record deleting command information transmitting step for transmitting record deleting command information generated in said record deleting command information generating step to said program recording device, and deleting said broadcast program from said broadcast recording device.

28. A broadcast recording method for broadcast programs according to claim 24, wherein said interruption source detecting step further comprises:

a terminal status information receiving step for receiving terminal status information showing terminal status of its own device reported from said mobile communication device; and

a recording necessity detection step for detecting the necessity level for recording a broadcast program viewed or recorded on said mobile communication device, from terminal status information received by said terminal status information receiving step.

29. A broadcast recording method for broadcast programs according to claim 28, wherein said terminal status information receiving step periodically receives in synchronization with preset time terminal status information showing terminal status of its own device reported from said mobile communication device.

30. A broadcast recording method for broadcast programs according to claim 28, wherein said terminal status information receiving step constantly receives terminal status information as updated information after a change in terminal status is reported from said mobile communication device during terminal status changes.

31. A broadcast recording method for broadcast programs according to any one of claims 28 through 30, wherein said recording necessity detection step detects the need for recording a broadcast program by detecting at least

one abnormal terminal status due to radio wave difficulties occurring in said mobile communication device, insufficient recording capacity, or worn batteries after terminal status information is received in said terminal status information receiving step.

32. A broadcast recording method for broadcast programs according to any one of claims 28 through 31, further comprising:

a recording necessity end detection step for detecting canceling of the necessity for recording a broadcast program viewed or recorded on said mobile communication device, from terminal status information received in said terminal status information receiving step; and

a recording notification step for notifying said mobile communication device of recording of a broadcast program based on recording command information generated by said recording command information generating step based on detection of end in said recording necessity end detection step.

33. A broadcast recording method for broadcast programs according to any one of claims 28 through 31, further comprising:

a recording necessity end detection step for detecting canceling of the necessity for recording a

broadcast program viewed or recorded on said mobile communication device, from terminal status information received in said terminal status information receiving step;

a recording notification/inquiry step for notifying said mobile communication device of recording of a broadcast program based on recording command information generated by said recording command information generating step, based on end detection by said recording necessity end detection step, and also inquiring on whether or not said recorded broadcast program is necessary;

a record deleting command information generating step for generating delete command information for said recording when a reply that said recording is not needed is sent from said mobile communication device in response to said recording notification/inquiry step; and

a record deleting command information transmitting step for transmitting record deleting command information generated in said record deleting command information generating step to said program recording device, and deleting said broadcast program recorded in said broadcast recording device.

34. A broadcast recording method for broadcast programs according to any one of claims 24 through 33, wherein said video-recording channel information receiving

step periodically receives in synchronization with preset time channel information on the broadcast program sent from a mobile communication device and viewed or recorded on said mobile communication device.

35. A broadcast recording method for broadcast programs according to any one of claims 24 through 33, wherein said video-recording channel information receiving step constantly receives channel information reported from mobile communication devices as updated information after a change in channels occurs.

36. A broadcast recording method for broadcast programs for recording broadcast programs distributed on a communication line by streaming to a mobile communication device containing a streaming broadcast receiving function, wherein said method comprises:

a distribution step for streaming distribution of broadcast programs via a communication line to a mobile communication device;

an interruption source detection step for detecting the cause of interruption of receiving of broadcast programs distributed by streaming on a communication line to said mobile communication device;

a distribution stop step for receiving the interruption source detection from the interruption source detection step, for stopping the streaming distribution to

said mobile communication device, and for recording the ending position of the currently ended streaming;

an interruption source end detection step for detecting the end of source status detected in said interruption source detection step; and

a distribution restart step for receiving the interruption end detection from said interruption source end detection step, and for restarting the streaming distribution of the broadcast program from the streaming ending position recorded in said distribution stop step.

37. A broadcast recording method for broadcast programs according to claim 36, wherein said interruption source detection step is a call detection step for detecting an outgoing or incoming call on a mobile communication device, and said interruption source end detection step is call termination detection step for detecting termination of an outgoing or incoming call detected by said call detection step.

38. A broadcast recording method for broadcast programs according to claim 36, wherein

said interruption source detection step further comprises:

a terminal status information receiving step for receiving terminal status information showing the status of

its own device reported from a mobile communication device; and

a recording necessity detection step for detecting the need to record a broadcast program viewed or recorded by said mobile communication device, from terminal status information received by said terminal status information receiving step, and

said interruption source end detection step detects canceling of the necessity for recording a broadcast program viewed or recorded by said mobile communication device, from terminal status information received by said terminal status information receiving step.

39. A communication control device connectable by a communication line to a program recording device containing broadcast receiving functions and a mobile communication device containing broadcast receiving functions and communication functions, wherein said communication control device comprises:

video-recording channel information receiving means for receiving as video-recording channel information, the broadcast program channel information sent from a mobile communication device and viewed or recorded on a mobile communication device;

user control information recording means for recording the video-recording channel information received

by the video-recording channel information receiving means, corresponding to users or mobile communication devices;

interruption source detection means for detecting the cause of interruption of viewing or recording of said broadcast program on said mobile communication device;

recording information command generating means for generating recording command information containing video-recording channel information based on the video-recording channel information of the user or mobile terminal device that is recorded in the user control information recording means, when an interruption source is detected in said interruption source detection means; and

recording command information transmitting means for sending the recording command information generated in said recording information command generating means to said program recording device, and for recording the video-recording channel information of the broadcast program into said program recording device.

40. A communication control device connectable via a communication line to a program recording device containing broadcast receiving functions and a mobile communication device containing broadcast receiving functions and communication functions, wherein said communication control device comprises:

video-recording channel information receiving means for receiving as video-recording channel information, the broadcast program channel information sent from a mobile communication device and viewed or recorded on a mobile communication device;

user control information recording means for recording the video-recording channel information received by the video-recording channel information receiving means, corresponding to the users or mobile communication devices;

call detection means for detecting an incoming or outgoing call for said mobile communication device;

recording information command generating means for accepting the detection of the outgoing or incoming call on the mobile communication device by said call detection means, and for generating the recording command information containing video-recording channel information based on video-recording channel information of the mobile terminal device recorded in said user control information recording means; and

recording command information transmitting means for sending the recording command information generated in said recording information command generating means to said program recording device, and for storing said video-recording channel information of the broadcast program.

41. A communication control device connectable via a communication line to a program recording device containing broadcast receiving functions and a mobile communication device containing broadcast receiving functions and communication functions, wherein said communication control device comprises:

video-recording channel information receiving means for receiving as video-recording channel information, the broadcast program channel information sent from a mobile communication device and viewed or recorded on a mobile communication device;

user control information recording means for recording the video-recording channel information received by said video-recording channel information receiving means, corresponding to the users or mobile communication devices;

terminal status information receiving means for receiving terminal status information showing the terminal status of its own device reported from a mobile communication device;

recording necessity detection means for detecting the necessity level for recording a broadcast program viewed or recorded on said mobile communication device, from terminal status information received by said terminal status information receiving means;

recording information command generating means for accepting detection results of the recording necessity detection means, and for generating the recording command information containing video-recording channel information based on the video-recording channel information of the user or mobile terminal device recorded in the user control information recording means; and

recording command information transmitting means for sending the recording command information generated in said recording information command generating means to said program recording device, and for recording said video-recording channel information of the broadcast program.

42. A communication control device for streaming distribution of a broadcast program by a communication line to a mobile communication device containing streaming broadcast receiving functions, comprising:

interruption source detection means for detecting the status of the mobile communication device causing interruption of receiving of the broadcast program by streaming distribution;

interruption source end detection means for detecting the end of interruption source detected by said interruption source detection means;

distribution end position recording means for recording the streaming position distributed to said mobile communication device; and

streaming distribution means for receiving the interruption source end detection from said interruption source end detection means, and for stopping the streaming distribution to the mobile communication device, and along with recording the stream position at the end of the current stream distribution in said position recording means, for receiving the interruption source end detection from said interruption source end detection means and for restarting the streaming distribution from the distribution end stream position recorded in said position recording means.

43. A communication control device for streaming distribution of a broadcast program via a communication line to a mobile communication device containing a streaming broadcast receiving functions, comprising:

call detection means for detecting at least either an incoming or outgoing call on the mobile communication device during streaming distribution of a broadcast program over a communication line;

call termination detection means for detecting termination of a call from an incoming or outgoing call detected by said call detection means;

distribution end position recording means for recording the stream position distributed to said mobile communication device; and

streaming distribution means for receiving detection of the incoming or outgoing call on a mobile communication device from said call detection means, and for stopping the streaming distribution to the mobile communication device, and along with recording the stream position at the end of the current stream distribution by said position recording means, for receiving detection of call termination of incoming or outgoing calls by the call termination detection means, and for restarting the streaming distribution from the distribution end stream position recorded in said position recording means.

44. A communication control device for streaming distribution of a broadcast program via a communication line to a mobile communication device containing a streaming broadcast receiving function, comprising:

terminal status information receiving means for receiving terminal status information showing the terminal status of its own device reported from a mobile communication device;

recording necessity detection means for detecting the necessity level for recording a broadcast program viewed or recorded on that mobile communication device, from terminal

status information received by said terminal status information receiving means;

recording necessity end detection means for detecting canceling of the necessity for recording a broadcast program viewed or recorded on that mobile communication device, from terminal status information received by said terminal status information receiving means;

distribution end position recording means for storing the stream position distributed to said mobile communication device; and

streaming distribution means for receiving detection from said recording necessity detection means, for stopping the streaming distribution to said mobile communication device, and along with recording the stream position at the end of the current stream distribution in said position recording means, for receiving detection from said recording necessity end detection means, and for restarting the streaming distribution from the distribution end stream position recorded in said position recording means.

45. A program according to claims 24 through 38 for implementing a broadcast recording method for broadcast programs on a computer.

46. A recording medium according to claims 24 through 38 readable by a computer loaded with a program for

implementing a broadcast recording method for broadcast programs on a computer.